CENTER FOR EDUCATION STATISTICS

Targeted Forecast   April 1988

Number of Public High School Graduates to Rise this Year

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1987-88 Graduates

● The Center for Education Statistics (CES) forecasts that 1.7 percent more students will receive diplomas at public high schools this year than in 1986-87. The number will rise from the estimated 2.428 million graduates last year to 2.468 million graduates in 1987-88.

● The increase in the number of graduates from 1986-87 to 1987-88 is the second increase in a row, even though secondary enrollment decreased. This apparent anomaly is the result of the decrease in 9th grade enrollment's being larger than the increase in 12th grade enrollment during the same time period.

5-Year Outlook

● The number of public high school graduates, which had decreased from 1977-78 to 1985-86, is projected to increase through 1988-89.

● After 1988-89, CES forecasts that the number of public high school graduates will begin to fall once again, at least until the early 1990's, reflecting trends in births 18 years earlier.

Forecast

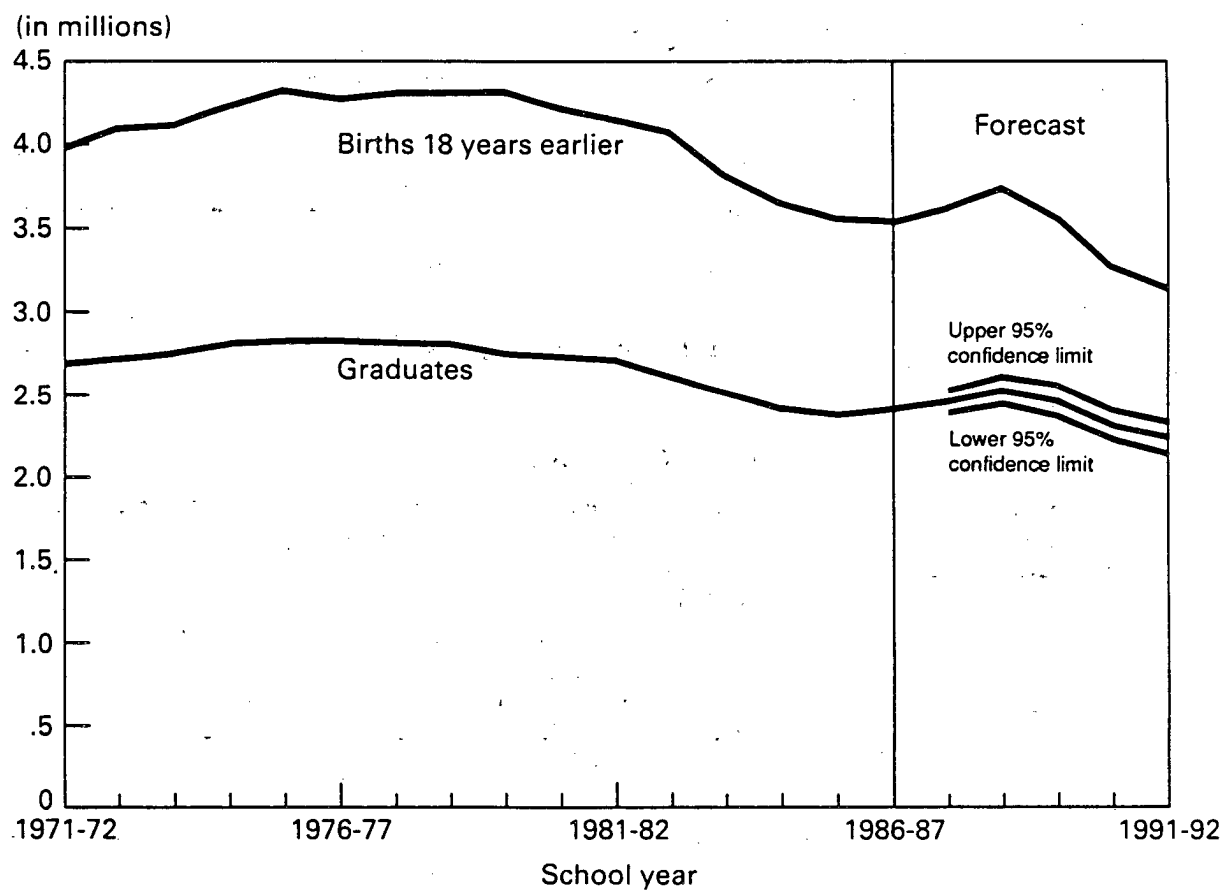**Public high school graduates, with forecasts: 1985-86 to 1991-92**

Status of data	School year	Number of public high school graduates
Actual	1985-86	2,382,457
Estimate	1986-87	2,428,285
Forecast	1987-88	2,468,000
	1988-89	2,536,000
	1989-90	2,472,000
	1990-91	2,320,000
	1991-92	2,243,000

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Division

NOTE.--These forecasts were prepared November 1987.

U.S. Department of Education
Office of Educational Research and Improvement   CS 88-615

Public high school graduates: 1971-72 to 1991-92

(in millions)

Technical Notes

Methodology

The number of public high school graduates was forecast by using double exponential smoothing to project graduates as a percent of the average of the number of 17- and 18-year-olds. These forecasts were then multiplied by the average of projections of the number of 17- and 18-year-olds to produce the high school graduate forecast. This method assumes that past trends in factors affecting graduation will continue for the next 5 years. Some of the factors implicitly included in the model are immigration, dropouts, transfers to and from private schools, and deaths.

Percent changes were calculated using unrounded numbers.

These forecasts were calculated before the early estimate for 1986-87 was available.

For further details on the method used to develop these forecasts, see *Projections of Education Statistics to 1997-98*, forthcoming.

Forecast Accuracy

CES conducted an analysis of projection errors in 1984. Mean absolute percent error (MAPE) was used to measure forecast accuracy. On the average, the MAPE (based on 14 editions of *Projections of Education Statistics*) for 1-year-ahead projections of public high school graduates was 1.1, for 2 years ahead it was 2.1, and for 5 years ahead it was 4.3. For example, if this pattern continues, the true value for 1988 would be expected to be within 2 percent of the forecast value.

For further details on the method used to calculate the confidence limits, see *Projections of Education Statistics to 1997-98*, forthcoming.

Sources of Data

The number of high school graduates used in these forecasts was obtained from the Common Core of Data (CCD) survey conducted by the U.S. Department of Education, Center for Education Statistics. The number of 17- and 18-year-olds with projections was obtained from *Current Population Reports* (Series P25), "Estimates of the Population of the United States," and unpublished tabulations by the Bureau of the Census. No comparable sources of this type of data exist for private schools, thus forecasts of private high school graduates could not be calculated. CES is conducting a survey of private schools that should yield, in a couple of years, the data needed to calculate forecasts of private school high school graduates.

Acknowledgments

The Center acknowledges the contributions of the reviewers of this targeted forecast: Ludmilla Murphy of the Bureau of Labor Statistics and Leo Eiden, Susan Hill, Don Malec, and John Sietsema of the Center for Education Statistics, Office of Educational Research and Improvement.

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